THAT WHICH IS CLAIMED:

1. A rotor configured to rotate with the flow of gas through a housing, the rotor comprising:

a body portion configured to rotate about an axis; and

a plurality of blades extending radially outward from the body portion, each blade defining a first edge and a second edge, the first edge extending generally radially and the second edge extending generally axially,

wherein the second edge of each blade is one of a leading and trailing edge of the blade and defines a nonlinear profile in radial-axial projection.

2. A rotor according to Claim 1 wherein the rotor is configured to be rotated proximate to a plurality of vanes in the housing.

3. A rotor according to Claim 1 wherein the rotor is a turbine wheel connected to a shaft, the wheel being configured to be rotated by the flow of the gas through the housing and thereby rotate the shaft.

4. A rotor according to Claim 1 wherein the rotor is a compressor wheel connected to a shaft, the wheel being configured to rotate with the shaft and thereby compress the gas and deliver the gas through the housing.

5. A rotor according to Claim 1 wherein the second edge defines a concave profile in radial-axial projection.

6. A rotor according to Claim 1 wherein the first edge defines a nonlinear profile in radial-axial projection.

7. A rotor according to Claim 1 wherein all of the blades are substantially similar.

8. A rotary apparatus configured to circulate a gas, the apparatus comprising:

a housing defining an inlet and an outlet;

a rotor disposed in the housing and configured to rotate with a flow of gas through the housing, the rotor having a body portion configured to rotate about an axis and a plurality of blades extending radially outward from the body portion, each blade defining a first edge and a second edge, the first edge extending generally radially and the second edge extending generally axially,

wherein the second edge of each blade is one of a leading and trailing edge of the blade and defines a nonlinear profile in radial-axial projection.

9. An apparatus according to Claim 8 further comprising a plurality of vanes disposed at circumferentially incremental locations in the housing radially outward from the second edge of the blades such that the blades are subjected to cyclically varying aerodynamic forces as the blades pass in proximity to the vanes during rotation of the rotor, thereby cyclically stressing the blades.

10. An apparatus according to Claim 9 wherein the vanes are adjustable to thereby control the flow of the gas through the housing.

11. An apparatus according to Claim 8 wherein the housing defines the inlet radially outward from the rotor, the rotor being a turbine wheel connected to a shaft and configured to be rotated by the circulation of gas through the housing and thereby rotate the shaft.

12. An apparatus according to Claim 8 wherein the housing defines a diffuser radially outward from the rotor, the rotor being a compressor wheel connected to a shaft and configured to be rotated by the shaft to thereby compress the gas in the housing and deliver the gas through the outlet to the diffuser.

13. An apparatus according to Claim 8 wherein the second edge of each blade defines a concave profile in radial-axial projection.

14. An apparatus according to Claim 8 wherein the first edge of each blade defines a nonlinear profile in radial-axial projection.

15. An apparatus according to Claim 8 wherein all of the blades are substantially similar.

16. A method of manufacturing a rotor structured to rotate with a flow of gas through a housing, the method comprising:

providing first parameters defining a geometric configuration of a blade extending radially from the rotor and defining an edge;

providing second parameters defining an expected cyclic pressure distribution on the blade during rotation of the rotor in the housing;

determining a high displacement portion of the blade being subjected to a relatively higher displacement than adjacent portions of the blade resulting from the expected cyclic pressure distribution;

adjusting the first parameters to remove at least part of the high displacement portion from the blade such that the edge of the blade is nonlinear in radial-axial projection; and

thereafter forming the blade according to the first parameters.

17. A method according to Claim 16 further comprising forming the rotor having a plurality of the blades extending radially outward therefrom, each of the blades defining a substantially similar geometric configuration.

18. A method according to Claim 16 wherein said adjusting step comprises adjusting the first parameters such that the edge defines a concave profile in radial-axial projection.

19. A method according to Claim 16 further comprising repeating said determining steps subsequent to said adjusting step, thereby iteratively adjusting the first parameters.

20. A method according to Claim 16 further comprising providing a plurality of vanes proximate to the edge of the blades.

21. A method according to Claim 16 wherein said first providing step comprises providing the first parameters such that the blade defines a second edge and wherein said adjusting step comprises adjusting the first parameters to remove at least part of the blade proximate to the second edge such that the second edge of the blade is nonlinear in radial-axial projection.